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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,453	04/14/2006	James McDonald Clark	41577/315565	4788
23370	7590	05/24/2007	EXAMINER	
JOHN S. PRATT, ESQ			CHIESA, RICHARD L	
KILPATRICK STOCKTON, LLP			ART UNIT	PAPER NUMBER
1100 PEACHTREE STREET			1724	
ATLANTA, GA 30309				
MAIL DATE		DELIVERY MODE		
05/24/2007		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/534,453	CLARK ET AL.	
	Examiner Richard L. Chiesa	Art Unit 1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 27 April 2007.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,4-8,12 and 13 is/are rejected.
- 7) Claim(s) 2,3 and 9-11 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 27 April 2007 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date, _____.                                     |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____.                         |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendment filed on April 27, 2007 has been entered.

### ***Drawings***

2. The replacement drawings were received on April 27, 2007. These drawings are accepted by the examiner.

### ***Election/Restrictions***

3. Upon review of the claims in light of applicants' remarks, the election of species requirement has been withdrawn in order to expedite prosecution of the case. Therefore, all of the presently pending claims will be treated on the merits.

### ***Claim Rejections - 35 USC § 112***

4. Claims 5, 12, and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. More specifically, the reasons for this rejection are: (A) Claim 5 is ambiguous because it depends from itself. (B) Claims 12 and 13 are indeterminate because claim 12 is apparently referring to a plurality of point electrodes even though claim 1 (from which claim 12 depends) only recites one point electrode.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicants are advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 4, 5, 7, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirth in view of Hoenig. Hirth (note Figures 1-3, and abstract) discloses an electrostatic precipitator with a point counter electrode 4, and a turbulence-free conduit having a two dimensional surface electrode 3 substantially as claimed. It would appear that Hirth does not explicitly mention that the point electrode is earthed or has a liquid delivery channel. In any case, Hoenig (note ref. num. 13, 38, 41, 51, Figure 5) teaches the well-known use of an earthed or grounded point counter electrode with a liquid delivery channel in an electrostatic precipitator

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for the purpose of ensuring efficient particle collection (note col. 7, lines 21-65). Consequently, it would have been obvious to one having ordinary skill in the art to employ an earthed point counter electrode with a liquid delivery channel in the Hirth electrostatic precipitator in order to facilitate the collection of particles as taught by Hoenig.

8. Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirth, taken together with Hoenig, as applied to claim 1 in paragraph 7 above, and further in view of Shiloh et al. Hirth, taken together with Hoenig, as described above in paragraph 7, discloses an electrostatic precipitator substantially as claimed with the possible exception of a plasma charger and a plurality of electrostatic field generators. Shiloh et al (note col. 5, lines 33-35, and ref. num. 12a-c, Figures 1-7) teach the use of a plasma charger and a plurality of electrostatic field generators in an electrostatic precipitation apparatus for the purpose of destroying hazardous gaseous pollutants (note col. 1, lines 7-26). Therefore, it would have been obvious to one of ordinary skill in the art to employ a plasma charge and a plurality of electrostatic field generators in the Hirth and Hoenig electrostatic precipitation apparatus in order to facilitate the removal of dangerous gases as taught by Shiloh et al.

#### ***Allowable Subject Matter***

9. Claims 2, 3, and 9-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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10. As allowable subject matter has been indicated, applicants' reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. These references have been cited as art of interest to show other electrostatic precipitators.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard L. Chiesa whose telephone number is (571) 272-1154.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane S. Smith, can be reached at (571) 272-1166.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1700 receptionist whose telephone number is (571) 272-1700.

Facsimile correspondence must be transmitted through (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard L. Chiesa

May 22, 2007

*Richard L. Chiesa*

RICHARD L. CHIESA  
PRIMARY EXAMINER  
ART UNIT 1724

*May 22, 2007*